ABSTRACT OF THE DISCLOSURE

An automatic exposure control camera always permits a subject to be photographed with appropriate brightness regardless of a front-lighted, back-lighted, or over-front-lighted condition. The area to be photographed is divided into 64 regions. The camera determines the average Yav64 of brightness over all the regions, the average YavU32 of brightness in the regions constituting the upper half, the average YavL32 of brightness in the regions constituting the lower half, the average YavD1 of brightness in regions in which brightness is lower than the average Yav64, the average YavD2 of brightness in regions in which brightness is lower than the average YavD1, the average YavB1 of brightness in regions in which brightness is higher than the average Yav64, and the average YavB2 of brightness in regions in which brightness is higher than the average YavB1. Based on the ratios between these averages, the camera distinguishes among a front-lighted, a back-lighted, and an over-front-lighted condition and controls the exposure of an image sensor accordingly.